



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,199	03/02/2004	Randy J. Hall	06005/37837B	1976

4743 7590 06/23/2004

MARSHALL, GERSTEIN & BORUN LLP  
6300 SEARS TOWER  
233 S. WACKER DRIVE  
CHICAGO, IL 60606

EXAMINER

WALTON, GEORGE L

ART UNIT PAPER NUMBER

3753

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/791,199

Applicant(s)

HALL ET AL.

Examiner

George L. Walton

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Strong. The generally square tool-accepting region is readable on socket elements 14-15 that will receive a wrench tool. Note that “generally square” is read to mean not totally square or being irregular in shape. The flow orifice is disposed below elements 14-15 which define a tapered shape 11. Element 13 is readable on seating surface of ring body 12. The flow passage is readable on the flow through passage of ring body 12. Note that the tapered inside surface of element 11 is readable on the contoured and different sized flow orifice that is positioned below or downstream of the tool region 14-15. The circular mechanical engaging feature with a complimentary surface on a valve assembly is readable on thread element 9 that releasably engages the threaded complimentary portion of element 6. Also, the neck-down portion is readable on the exterior portion of

element 11 below thread element 9. This neck-down portion engages element 10, which inherently will align the valve seat ring 12 when installed via the thread element 9 and the complimentary threads of element 6. Finally, the transition surfaces are readable on the shoulder surface between the tool region 14-15 and the flow orifice defined by the inside tapered surface of element 11 and the shoulder surface between element 13 and elements 14-15. Such surfaces will inherently provide **substantial** smooth and gradual flow efficiency. This means not totally smooth and gradual.

Claims 1-7, 9-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Gausman et al. The generally square tool-accepting region is readable on socket elements 14-15 that will receive a wrench tool. Note that “generally square” is read to mean not totally square or being irregular in shape. The flow orifice 94 is disposed below elements 96 which. Element 13 is readable on seating surface of ring body 12. The flow passage is readable on the flow through passage of ring body 80. Note that element 96 is readable on the contoured and different sized flow orifice that is positioned below or downstream of the tool region 96. See column 4, lines 20-25 that teaches the flow orifice being irregular or hexagonal in shape, which is contoured and sized differently than the tool region 96. The circular mechanical engaging feature with a complimentary surface on a

valve assembly is readable on thread element 84 that releasably engages the threaded complimentary portion 86 of element 12. Also, the neck-down portion is readable on the exterior portion of element 80 and 82 below thread element 84. This neck-down portion engages element 28, which inherently will align the valve seat ring 80 when installed via the threads of elements 84 and 86. Note that the transition surfaces are readable on the shoulder surfaces between seat 92 and element 96 and the shoulder surface between elements 94 and 96. Such surfaces will inherently provide substantial smooth and gradual flow efficiency. This means not totally smooth and gradual.

Claims 1-7, 10-14 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kryger. The generally square tool-accepting region is readable on socket element 11 that will receive a wrench tool. Note that "generally square" is read to mean not totally square or being irregular in shape. The flow orifice is disposed below element 11 which define a tapered end below the non-referenced resilient member of seat ring body 7. Element 3 is readable on seating surface of ring body 7. The flow passage is readable on the flow through passage of ring body 7. Note that the tapered inside surface of element 11 is readable on the contoured and different sized flow orifice that is positioned below or downstream of the tool region 11. The circular mechanical engaging feature with a complimentary surface

Art Unit: 3753

on a valve assembly is readable on the non-referenced threads of ring body 7 in front of element 16 that releasably engages the threaded complimentary portion of valve assembly body 2. Finally, the transition surfaces are readable on the tapered surface between the tool region 14-15 and the seat surface 3 and the surfaces of the flow passages below element 11. Such surfaces will inherently provide **substantial** smooth and gradual flow efficiency. This means not totally smooth and gradual.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to George L. Walton whose telephone number is 703-308-2596. The examiner can normally be reached on M-F, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 703-308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 3753

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
George L. Walton  
Primary Examiner  
Art Unit 3753

GLW